

ABSTRACT

A generator and battery charging unit is operable on a wheeled apparatus, including rollerblades and skateboards. The charging unit is operable while the wheeled apparatus is used to provide fresh power to a rechargeable battery. A charging base holds one or more batteries for charging. The charging base receives electric current produced by a generator powered by motion of the wheels. For this purpose, a stepper motor is mounted to the wheeled apparatus and connected to the charging base. The stepper motor has a shaft that communicates with a wheel on the apparatus. The shaft is rotatable with the wheel to power the stepper motor and generate electric current. The electric current is passed to the charging base to charge one or more batteries in the charging base. In addition to the charger, the stepper motor may be connected to an output jack or an accessory to be operated by current from the stepper motor.